

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number  
**WO 2005/050425 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 1/32,**  
G05F 1/46

(21) International Application Number:  
PCT/IB2004/003939

(22) International Filing Date:  
18 November 2004 (18.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
GB 0326862.0 18 November 2003 (18.11.2003) GB  
GB 0326864.6 18 November 2003 (18.11.2003) GB

(71) Applicant (for all designated States except US):  
**FREESCALE SEMICONDUCTOR, INC.** [US/US];  
6501 William Cannon Dr., Austin, TX 78735 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ROZEN, Anton**  
[IL/IL]; Tzvony 62, 70700 Gedera (IL). **PRIEL, Michael**  
[—/IL]; Shmuel Hanagid 18/15, 46498 Hertzelia (IL).  
**SMOLYANSKY, Leonid** [IL/IL]; Ha'Irus 10 Orot, 30600  
Or-Akiva (IL). **BOBROV, Boris** [IL/US]; 2716 Barton  
Creek Blvd., Appt # 811, Austin, TX 78735 (US).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- with amended claims and statement

**Date of publication of the amended claims and statement:**  
29 September 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD AND DEVICE FOR REGULATING A VOLTAGE SUPPLY TO A SEMICONDUCTOR DEVICE

(57) Abstract: A device for regulating a voltage supply to a semiconductor device, the device comprising memory for storing a plurality of performance ranges, wherein the respective performance ranges are associated with a respective supply voltage; means for measuring the performance of the semiconductor device; and a regulator for modifying the supply voltage to the semiconductor device if the measured performance of the semiconductor device is not within a predetermined portion of the performance range associated with the voltage supplied to the semiconductor device.

WO 2005/050425 A1